

## REMARKS

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks.

### **Summary of Office Action**

In the December 11, 2006 Office Action Claims 1-24 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,663,587 to Silver et al., and Claims 1-3, 5-7, 11-12, 18-19, and 24 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,885,246 to Ford.

### **Summary of Response to Office Action**

By this Amendment, Claims 1, 2, 4-6, 9, 10 and 19 are amended and claims 8, 15, 17, 22, and 24 are deleted without prejudice or disclaimer. Accordingly, the claims currently pending in this application are Claims 1-7, 9-14, 16, 18-21, and 23. Claims 1 and 5 are the only independent claims.

### **All Claims Define Allowable Subject Matter**

In the Office Action, beginning at page 2, paragraph 2, claims 1-24 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,663,587 to Silver et al. ("Silver'587"). This rejection is respectfully traversed for the following reasons.

In the present application, Claim 1 is directed to a breast pump having a combination of features including an atmospheric pressure condition creating structure that has at least one vent opening formed by only the horn member so as to directly open the space between the deformable member and the horn member to atmosphere. A first side of the at least one vent opening in the horn member is exposed directly to the space between the horn member and the deformable member. An opposite side of the at least one vent opening in the horn member is exposed directly to atmosphere exterior to the breast pump, and the atmospheric pressure condition creating structure is configured to maintain an atmospheric pressure condition in the

space between the deformable member and the horn member continuously during operation of the internal space pressure altering device during both a time at which the negative pressure condition is present in the sealed space and a time at which the atmospheric pressure condition is present in the sealed space, as recited in claim 1.

The embodiment of the Silver'587 patent relied on in the Office Action is described at columns 31-32 of Silver'587 regarding Figures 29, 30 and 32, which are reproduced below.

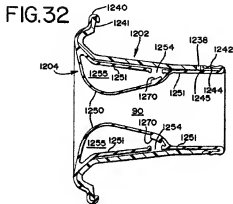
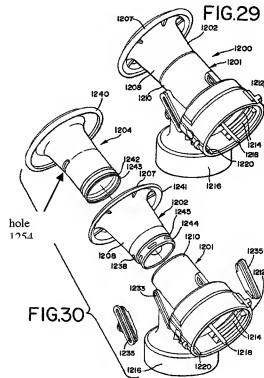


FIG. 32 of Silver'587



FIGS. 29 and 30 of Silver'587

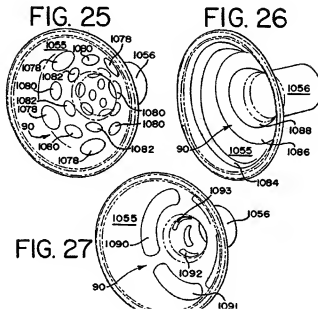
Silver'587 discloses an "embodiment 1200" in which a pump (not shown) produces a negative pressure in interior space 90 and an alternating positive/negative pressure in the chamber 1255 formed by the flexible shield part 1204 and receptacle part 1202. According to Silver'587, the pump is attached via the collar 1212 to the base part 1201. Pump pressure is

delivered to the space 90 by a port 1230 (see Figure 31) while pump pressure is delivered to chamber 1255 by a conduit 1233 which is formed by lateral ports 1218 and 1220. The caps 1235 shown in Figure 29 close the outboard sides of the conduit 1233 (presumably for easily exhausting the conduit 1233). Conduit 1233 terminates at an interior outlet of the base part 1201 which aligns with a hole 1238 formed in the receptacle part 1202 when the receptacle part 1202 is attached to the base part 1201. See col. 31, lines 3-48 of the Silver'587 patent. A double-walled structure 1250, 1251 of the flexible shield part 1204 is placed in fluid communication with hole 1238. See *Id.* at lines 60-67.

In the Office Action, it is alleged that Silver'587 discloses a hole 1238 that connects the chamber 1255 to a pressure source exterior to the breast pump. However, Claim 1 includes at least the feature of a vent opening formed by only the horn member so as to directly open the space between the deformable member and the horn member to atmosphere. Silver'587 does not teach or suggest at least this feature of Claim 1. As explained above, the hole 1238 is part of a closed conduit that connects the chamber 1255 to a pump via the base part 1201. Both the base part 1201 and the receptacle 1204 are needed to expose the chamber 1255 to a pressure source. Accordingly, Silver'587 does not teach or suggest a vent opening formed by only the horn member so as to directly open the space between the deformable member and the horn member to atmosphere.

Independent Claim 5 recites a breast pump having a combination of features, including a deformation guide portion that is configured to regulate a deformation direction of the deformable member, the deformation guide portion having a thinner wall than a wall of the deformable member, and an atmospheric pressure condition creating structure configured to maintain an atmospheric pressure condition in the space between the deformable member and the horn member continuously during operation of the internal space pressure altering device during

both a time at which the negative pressure condition is present in the sealed space and a time at which the atmospheric pressure condition is present in the sealed space. In contrast, Silver'587 illustrates only solid, bubble-type, spiral or intermittent protrusions for the flexible shield part 1056. See Figures 25-27 (reproduced below).



Figs. 25-27 of Silver'587

There is no deformation guide portion in Silver'587's flexible shield part illustrated above. None of the areas of the flexible shield part spaced from the solid, bubble-type, spiral or intermittent protrusions can be considered a deformation guide portion that is configured to regulate a deformation direction of the deformable member, the deformation guide portion having a thinner wall than a wall of the deformable member, as recited in claim 5. Silver'587 does not teach or suggest at least the above features of Claim 5.

In addition, Silver'587 does not teach or suggest an atmospheric pressure condition creating structure configured to maintain an atmospheric pressure condition in the space between

the deformable member and the horn member continuously during operation of the internal space pressure altering device during both a time at which the negative pressure condition is present in the sealed space and a time at which the atmospheric pressure condition is present in the sealed space. Instead, as pointed out by the Examiner, the Silver'587 device discloses a device in which a chamber 1255 is connected via hole 1238 to a closed conduit structure that provides suction during operation of the device.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. Of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Accordingly, it is respectfully submitted that Silver'587 fails to meet the criteria for anticipating independent Claims 1 and 5 because the Silver'587 fails to disclose or teach at least the claimed features recited above.

Further, since Claims 2-4, 9-14, 16, 18-21 and 23 depend from and therefore incorporate all the features of Claim 1, and because Claim 6 depends from and therefore incorporates all the features of Claim 5, Claims 2-4, 6, 9-14, 16, 18-21, and 23 are also not anticipated by Silver'587 at least for the above reasons for which Claims 1 and 5 are not anticipated, respectively, and for the separate features that Claims 2-4, 6, 9-14, 16, 18-21, and 23 recite. The rejection of claims 7, 15, 17, 22, and 24 are mooted in view of their cancellation without prejudice or disclaimer in this Amendment.

Thus, Applicant respectfully requests that the rejection of claims 1-24 under 35 U.S.C. § 102(e) be withdrawn.

In the Office Action, beginning at page 4, paragraph 3, Claims 1-3, 5-7, 11, 12, 18, 19 and 24 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,885,246 to Ford ("Ford'246"). This rejection is respectfully traversed for at least the following reasons.

As set forth in columns 3 and 4 of the Ford'246 specification, a negative pressure is supplied to an area of protrusions 16 or solid lumps 17 formed in a flexible insert 5 via conduits or recesses/pocket regions 10. The pressure source is connected to the pocket regions 10 located beneath solid lumps 17 via a duct/conduit 12 formed in the flexible insert 5. See col. 1, line 62 through col. 2, line 6 of Ford'246. Thus, Ford'246 does not teach or suggest a vent opening formed by only a horn member so as to directly open the space between the deformable member and the horn member to atmosphere, as recited in Claim 1.

Ford'246 is also deficient in its disclosure of the features set forth in Claim 5. Ford'246 illustrates the formation of protrusions 17 in the flexible insert 5. However, nowhere does Ford'246 teach or suggest a deformation guide portion that is configured to regulate a deformation direction of the deformable member provided on the deformable member, the deformation

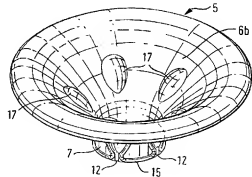


FIG. 9 of Ford'246

guide portion having a thinner wall than a wall of the deformable member, as recited in Claim 5.

Further, since Claims 2, 3, 7, 11, 12, 18, and 19 depend from and therefore incorporate all the features of Claim 1, and because Claim 6 depends from and therefore incorporates all the features of Claim 5, Claims 1-3, 5, 7, 11, 12, 18, and 19 are also not anticipated by Ford'246 at least for the above reasons for which Claims 1 and 5 are not anticipated, respectively, and for the separate features that Claims 2, 3, 7, 11, 12, 18, and 19 recite. The rejection of claim 24 is mooted in view of its cancellation without prejudice or disclaimer in this Amendment

Thus, Applicant respectfully requests that the rejection of Claims 1-3, 5-7, 11, 12, 18, 19, and 24 under 35 U.S.C. § 102(b) be withdrawn.

**Conclusion**

Applicant respectfully submits that the present patent application is in condition for allowance in its entirety. An early indication of the allowability of this patent application is therefore respectfully solicited.

If the Patent Examiner believes that a telephone conference with the undersigned would expedite passage of this patent application to issue, he is invited to call on the number below.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is hereby authorized to charge fees necessitated by this paper, and to credit all refunds and overpayments, to our Deposit Account listed on the application transmittal filed with this application.

Respectfully submitted,  
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